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(JIMGA/JSA)

Oxygen

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In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

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Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of Economy, Trade and Industry through deliberations at the Japanese Industrial Standards Committee as the result of proposal for revision of Japanese Industrial Standard submitted by Japan Industrial and Medical Gases Association (JIMGA)/Japanese Standards Association (JSA) with the draft being attached, based on the provision of Article 12 Clause 1 of the Industrial Standardization Law applicable to the case of revision by the provision of Article 14.

Consequently **JIS K 1101**:2006 is replaced with this Standard.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, applications for a patent after opening to the public or utility model rights. The relevant Minister and the Japanese Industrial Standards Committee are not responsible for identifying any of such patent rights, applications for a patent after opening to the public or utility model rights.

Oxygen

O_2 *FW*: 32.00

1 Scope

This Japanese Industrial Standard specifies (liquefied or compressed) oxygen for industrial use fed into a high pressure gas vessel (hereafter referred to as oxygen).

WARNING 1 Liquefied oxygen has extremely low temperature such as approximately −183 °C at atmospheric pressure, therefore the protective device e.g. leather gloves shall be put on for preventing frostbite.

WARNING 2 Liquefied oxygen easily and rapidly evaporates at ordinary temperature and expands to approximately 860 times in volume, therefore it shall not be enclosed in piping and vessels. When it is feared that liquefied oxygen is shut in, a safety valve or relief valve is provided. Furthermore, compressed oxygen is usually supplied in the vessel charged to high pressure such as approximately 15 MPa or 20 MPa, therefore it shall be handled by using pressure reducing valves or by opening and closing valves slowly according to the provisions relating to consumption and disposal in the High Pressure Gas Safety Act.

WARNING 3 Oxygen has a higher susceptibility to burn than air, and therefore shall not be in contact with flammable substances such as fat and oil, and organic compounds. For the oxygen supplying system, the adhering of fat and oil is prohibited, and organic compounds, dust, rust and burrs shall be expelled e.g. by using inert gas.

NOTE : The consumption and disposal of high pressure gases are specified in Article 24-2 to Article 25 of the High Pressure Gas Safety Act (Act No. 204 of June 7, 1951).

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7920 *Hygrometers—Test method*

JIS B 7983 *Continuous analyzers for oxygen in flue gas*

JIS H 3260 *Copper and copper alloy wires*

JIS K 0050 *General rules for chemical analysis*

JIS K 0225 *Testing methods for determination of trace components in diluent gas and zero gas*

JIS K 0512 *Hydrogen*

JIS K 8085 *Ammonia solution (Reagent)*